



Universal Calibrator (UC) System

For Calibrating Irradiance and Temperature in QUV & Q-SUN Weathering Test Chambers

Overview

The Universal Calibrator system (UC) is a revolutionary system for calibrating temperature and irradiance across all Q-Lab weathering chambers. It utilizes inexpensive, modular, and disposable “smart sensors” to simplify calibrations and dramatically lower operating costs over competing approaches.

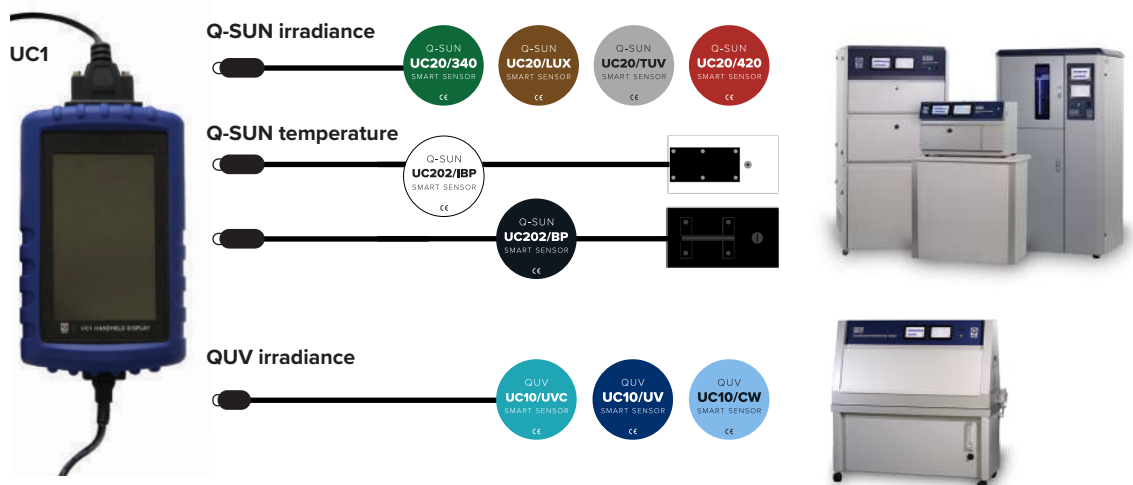
Features and Benefits

- Calibrations can be performed directly on Gen 4 touchscreens, or using the UC1 Handheld Display
- Modular irradiance and temperature smart sensors minimize total operating costs
- A single irradiance smart sensor (340 nm, 420 nm, or TUV) can calibrate multiple optical (UV) filter configurations
- Inexpensive smart sensors are designed to be disposable or may be recalibrated (ISO 17025 accredited certificates provided in both cases)
- Allows 8 user-selectable languages
- Convenient on-screen reminders to replace (or recalibrate) smart sensors when due



How the UC Works

The UC system is designed to calibrate the on-board irradiance and temperature sensors in any QUV or Q-SUN weathering chamber equipped with SOLAR EYE irradiance control. The system consists of a UC1 handheld touchscreen display and various smart sensors. The UC1 Handheld Display allows smart sensor calibration of any previous model of QUV and Q-SUN tester. The UC1 is powered from the test chamber and never needs to be calibrated.



Universal Calibrator Available Part Numbers:

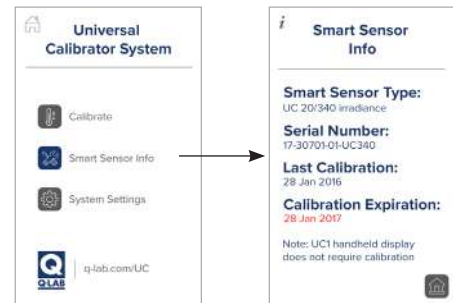
Tester Model	Description	Name	Color Code	Used For
All	Handheld Display	UC1		All Smart Sensors (only needed for Gen 1-3 testers)
QUV	Irradiance Smart Sensor	UC10/UV		UV 313/340/351 lamps
		UC10/CW		UV Cool White (Lux) lamps
		UC10/UVC		UVC-254 lamps
Q-SUN	Irradiance Smart Sensor	UC20/340		Xenon arc lamps 340 nm control ¹
		UC20/420		Xenon arc lamps 420 nm control
		UC20/TUV		Xenon arc lamps TUV (300-400 nm) control ²
		UC20/LUX		Xenon arc lamps Lux control
	Temperature Smart Sensor	UC202/BP		Uninsulated Black Panel
		UC202/IBP		Insulated Black Panel (aka Black Standard)

Notes:

1. A single UC20/340 smart sensor replaces multiple CR20/340 units (Q, QB, D, BBF, BSL, and W)
2. A single UC20/TUV smart sensor replaces both the CR20/TUV and TUV/IR.

Smart Sensor Recalibration/Replacement

Calibration with the UC system is designed to simplify the entire calibration process. As a smart sensor nears its next calibration date, it will notify the user. Inexpensive smart sensors are designed to be disposable, in order to minimize shipping costs and tester downtime. Alternatively, smart sensors may be sent to Q-Lab for recalibration. The UC1 is a simple display that never requires calibration. All calibrations are accredited and performed in accordance with ISO 17025.



Universal Calibration Displays

Onboard touchscreen displays (Gen 4) or the UC1 Handheld Display (previous models) further simplify the calibration process through convenient drop-down menus to select tester, lamp, and optical filter configurations. Users can select one of eight languages (English, German, French, Spanish, Italian, Chinese, Korean, and Japanese) for calibration.



Onboard Displays (Gen 4)



UC1 Handheld Display

Warranty

The Universal Calibrator System and Smart Sensors are guaranteed against defects in workmanship or materials for one year. Liability is limited to replacing or repairing any part or parts which are defective in materials or workmanship and are returned to our factory, shipping costs pre-paid. Liability in all events is limited to the purchase price paid. Damage due to accident or abuse is not covered. Labor and travel costs are not covered. Q-Lab Corporation makes no other warranties, including implied warranties of merchantability or fitness for a particular purpose, except as may be expressly provided by Q-Lab Corporation in writing. Q-Lab Corporation shall not be liable for any incidental, consequential, special, or contingent damages arising out of the sale or use of any product.



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